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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/620,597

07/17/2003

Seiji Hachisuka

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EXAMINER

DEB, ANJAN K

ART UNIT

PAPER NUMBER

2858

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/620,597	Applicant(s) HACHISUKA ET AL.	
	Examiner Anjan K. Deb	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 2-10,12-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,11,27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

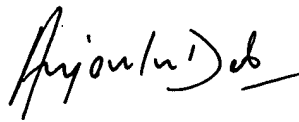
Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date
:7/17/03,11/6/03,2/27/04,2/16/05,9/19/05,.



ANJAN DEB
PRIMARY EXAMINER

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 1, 11 and 27 in the reply filed on 12/26/2006 is acknowledged.

Claims 2-10, 12-26 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected groups (II, III) of invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/26/2006.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 11, 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Holmquest (US 5,619,105 A).

Re claim 1, Holmquest discloses current detection method of an inverter (Fig. 1) that converts DC input into AC output and supplies the AC output to a load (fluorescent lamps) (column 2 lines 59-63) comprising: a step that detects change in a circuit current of said inverter through the medium of the magnetic flux change (magnetically detecting)(column 3 line 41) due to the change of said circuit current caused by discharge (arc)(column 3 line 37-39).

Re claims 11 and 27, Holmquest discloses current detection method of an inverter (Fig. 1) that converts DC input into AC output and supplies the AC output to a load (fluorescent lamps) (column 2 lines 59-63) comprising: a step that detects change in a circuit current of said inverter through the medium of the magnetic flux change (magnetically detecting)(column 3 line 41) due to the change of said circuit current caused by discharge (arc)(column 3 line 37-39) and a step that detects based on a result of a detection of the change in said circuit current whether or not anomaly exists in a current route including said load, since Holmquest discloses detecting an anomaly (arcing) in a current route including the load by detecting (passing) only the high frequency RF signals resulting from arcing (column 3 lines 63 and 64).

4. Claims 1, 11, 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Parker et al. (US 5,892,646 A).

Re claims 1, 11, 27 Parker et al. disclosed magnetically coupled current sensing circuit 64,66 for detecting circuit anomaly (ground fault detection) including inverter 52 for supplying high-frequency current to neon lamp load 62 (Fig. 4B) including a step of detecting based on a result of a detection of the change in said circuit current whether or not anomaly exists in a current route including said load (column 2 lines 50-63).

Conclusion

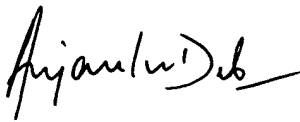
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Moisin et al. (US 5,583,402 A) disclosed magnetically coupled current sensing circuit (current transformer) 26 for an inverter (Q7, Q8) for supplying lamp load R_L (Fig. 1,6B).

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Miki et al. (US 5,563,777 A) discloses magnetically coupled current detecting circuit 52 for detecting circuit anomaly (column 3 lines 24-52) for an inverter supplying AC power to discharge lamp load 5 (Fig. 1).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Anjan K. Deb whose telephone number is 571-272-2228. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached at (571) 272-2168.



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Primary Patent Examiner

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1/28/07